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ABSTRACT

The present invention provides a novel process and its required fluxable materials for building low-cost flip-chip interconnect structures. The novel process involves two fluxable materials, fluxable wafer-level compressive-flow underfill material (WLCFU) and fluxable tacky film, and applies these two materials on a wafer level. The two materials can provide sufficient fluxing capability during solder reflow and significant improvement of the fatigue life of the formed solder interconnects after fully cure cured.